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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,208	04/05/2001	Antti Latva-Aho	324-010243-US(PAR)	5366

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EXAMINER

DEAN, RAYMOND S

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 01/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

TS

Office Action Summary

Application No.

09/827,208

Applicant(s)

LATVA-AHO ET AL.

Examiner

Raymond S Dean

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/5/01
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Regarding claims 6, 8, and 14 the phrase "such as" renders the claims indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Claim 7 depends on Claim 6 and Claim 15 depends on Claim 14 therefore examiner gives same reason as set forth above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 5, 11 – 13, and 16 - 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Haverinen et al. (US 2002/0012433 A1).

Regarding Claim 1, Haverinen teaches a method of connecting an access point to other network elements in a wireless telecommunication system comprising at least

one access point and at least one fixed network part (Figure 1, Section 0171 - Section 0172, MIP is the access point), comprising the steps of: storing data on an IC card for connecting at least one access point to a functional connection with the fixed network part, coupling the IC card into a functional connection with the access point in response to a need to connect the access point to the fixed network part, and connecting necessary resources of the fixed network part to a functional connection with the access point on the basis of said stored data (Figure 1, Section 0169 - Section 0187, the SIM card is the IC card which stores identity and authentication data, the MIP is the access point, the mobile terminal, which comprises the SIM/IC card, is connected to the GSM/fixed network via its connection with the MIP/access point after the authentication hand-shaking between the SIM/IC card and the fixed network is completed thus an inherent coupling of the SIM/IC card into a functional connection with said MIP/access point is taught).

Regarding Claim 2, Haverinen teaches all of the claimed limitations recited in Claim 1. Haverinen further teaches the method of checking in the fixed network part if the IC card is entitled to use the necessary resources of the fixed network part, and connecting the necessary resources of the fixed network part to a functional connection with the access point in response to the IC card having the right to use the resources of the fixed network part (Figure 1, Figure 2, Section 0169 – Section 0187, the mobile terminal, which comprises the SIM/IC card, is connected to the GSM/fixed network via its connection with the MIP/access point after the authentication hand-shaking between the SIM and the fixed network is completed).

Regarding Claim 3, Haverinen teaches all of the claimed limitations recited in Claim 2. Haverinen further teaches a method wherein said data includes an address of at least one fixed network part element and a specific identity of the IC card, the fixed network part element also comprises data on the IC card, assorted by the specific identity, the method further comprising the steps of: transmitting a request for connecting the access point to the network element of the fixed network part on the basis of the stored address, and checking the rights of the IC card by checking the data on the IC card on the basis of the specific identity and by authenticating the IC card. (Figure 1, Figure 2, Section 0169 – Section 0188, the HAAAs, which are a part of the fixed network, all have an address thus enabling the FAAA to select a particular HAAA based on the NAI/address received from the mobile terminal, since authentication only takes place when the mobile terminal requests access to the GSM/fixed network and the mobile terminal can only access the GSM/fixed network via the MIP/access point an inherent method of transmitting a request for connecting the MIP/access point to the network element of the GSM/fixed network part on the basis of the stored address is taught).

Regarding Claim 4, Haverinen teaches all of the claimed limitations recited in Claim 1. Haverinen further teaches a method wherein - said data includes at least one key and algorithm required for authenticating the IC card, the method further comprising the steps of transmitting an authentication response, calculated by means of at least one key and algorithm, to the fixed network part, authenticating the IC card by checking the transmitted authentication response in the fixed network part, and connecting the

access point to a functional connection with the resources of the fixed network part in response to the authentication response being acceptable (Figure 1, Figure 2, Section 0169 – Section 0187, the mobile terminal, which comprises the SIM/IC card, is connected to the GSM/fixed network via its connection with the MIP/access point after the authentication hand-shaking between the SIM/IC card and the fixed network is completed).

Regarding Claim 5, Haverinen teaches all of the claimed limitations recited in Claim 1. Haverinen further teaches a method wherein said data includes at least one key and algorithm for ciphering the connection between the access point and the fixed network part, and the method further includes the step of ciphering the traffic between the access point and the fixed network part by utilizing at least one key and algorithm (Figure 1, Figure 2, Section 0169 – Section 0187).

Regarding Claim 11, Haverinen teaches a wireless telecommunication system comprising at least one access point and at least one fixed network part, wherein the access point is arranged to use an IC card, onto which is stored data for connecting at least one access point to a functional connection with the fixed network part, and the access point and the fixed network part are arranged to connect necessary resources of the fixed network part to a functional connection with the access point on the basis of said stored data (Figure 1, Figure 2, Section 0169 – Section 0187, the SIM card is the IC card which stores identity and authentication data, the mobile terminal, which comprises the SIM/IC card, is connected to the GSM/fixed network via its connection with the MIP/access point after the authentication hand-shaking between the SIM/IC

card and the GSM/fixed network is completed thus an inherent coupling of the SIM/IC card into a functional connection with said MIP/access point is taught).

Regarding Claim 12, Haverinen teaches all of the claimed limitations recited in Claim 11. Haverinen further teaches a wireless telecommunication system wherein the fixed network part is arranged to check if the IC card is entitled to use the necessary resources of the fixed network part, and the access point and the fixed network part are arranged to connect the access point and necessary resources of the fixed network part to a functional connection in response to the IC card being entitled to use the necessary resources of the fixed network part (Figure 1, Figure 2, Section 0169 – Section 0187).

Regarding Claim 13, Haverinen teaches all of the claimed limitations recited in Claim 12. Haverinen further teaches a wireless telecommunication system wherein said data comprises an address of at least one fixed network part element and a specific identity of the IC card, the fixed network part element also comprises data on the IC card, assorted by the specific identity, the access point is arranged to transmit a request for connecting the access point to the network element of the fixed network part on the basis of the stored address, and the network element of the fixed network part is arranged to check rights of the IC card by checking the data on the IC card on the basis of the specific identity and by authenticating the IC card (Figure 1, Figure 2, Section 0169 – Section 0188, the HAAAs, which are a part of the fixed network, all have an address thus enabling the FAAA to select a particular HAAA based on the NAI/address received from the mobile terminal, since authentication only takes place when the mobile terminal requests access to the GSM/fixed network and the mobile terminal can

only access the GSM/fixed network via the MIP/access point an inherent method of transmitting a request for connecting the MIP/access point to the network element of the GSM/fixed network part on the basis of the stored address is taught).

Regarding Claim 16, Haverinen teaches an access point in a wireless telecommunication system, wherein the access point comprises card means for coupling an IC card to the access point and for reading data on the IC card, and the access point comprises control means and transceiver means for setting up a functional connection to required resources of a fixed network part on the basis of the data stored on the IC card (Figure 1, Section 0171 – Section 0176, the SIM/IC card is coupled to the MIP/access point via the connection between the mobile terminal that comprises the said SIM/IC card and said MIP/access point, the data on the SIM/IC card is read by the MIP/access point and transmitted to the GSM/fixed network via the GAGW such that the authentication process can be completed and such that the mobile terminal can access the GSM/fixed network, the MIP/access point transmits and receives data to and from the GSM/fixed network)

Regarding Claim 17, Haverinen teaches all of the claimed limitations recited Claim 16. Haverinen further teaches an access point in a wireless telecommunication system as claimed in wherein said data comprises an address of at least one fixed network part element and a specific identity of the IC card, the control means are arranged to send a request including a specific identity of the IC card for connecting the access point to a network element of the fixed network part on the basis of the stored address, and the control means are arranged to set up a functional connection to at

least one network element of the fixed network part in response to an accepted request for connecting the access point (Figure 1, Figure 2, Section 0169 – Section 0188, the HAAAs, which are a part of the fixed network, all have an address thus enabling the FAAA to select a particular HAAA based on the NAI/address received from the mobile terminal, since authentication only takes place when the mobile terminal requests access to the GSM/fixed network and the mobile terminal can only access the GSM/fixed network via the MIP/access point an inherent method of transmitting a request for connecting the MIP/access point to the network element of the GSM/fixed network part on the basis of the stored address is taught).

Regarding Claim 18, Haverinen teaches all of the claimed limitations recited Claim 16. Haverinen further teaches an access point wherein the control means are arranged to transmit a request to the IC card for calculating an authentication response and at least one ciphering key, the control means are arranged to transmit the authentication response calculated on the IC card to the fixed network part, and the transceiver means are arranged to cipher the data to be sent to the fixed network part and to decrypt the data received from the fixed network part by means of at least one ciphering key calculated on the IC card (Figure 1, Figure 2, Section 0169 – Section 0187).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9, 10, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haverinen et al. (US 2002/0012433 A1) in view of Chuah et al. (US 6,594,240 B1)

Regarding Claim 9, Haverinen teaches all of the claimed limitations recited in Claim 1. Haverinen does not specifically teach an access point that is a base station in a UMTS system, and a fixed network part that comprises at least a UMTS system radio network controller RNC.

Chuah teaches an access point that is a base station in a UMTS system, and a fixed network part that comprises at least a UMTS system radio network controller RNC (Figure 1, Column 6 lines 63 – 65, Column 7 lines 13 – 14, Column 7 lines 25 – 28).

Haverinen (Section 0162) and Chuah both teach a wireless communication system that is a UMTS system thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the base station and radio network controller taught in Chuah in the UMTS system taught in Haverinen such that a properly functioning UMTS system is enabled.

Regarding Claim 10, Haverinen teaches all of the claimed limitations recited in Claim 1. Haverinen further teaches an access point that is a UMTS system (Figure 1, Section 0162, Section 0171, there is a second radio link for communicating directly with the UMTS network thus the access point is the UMTS network).

Haverinen does not specifically teach a radio network controller and a fixed network part that comprises one or more network elements of a core network of a UMTS system.

Chuah teaches a radio network controller and a fixed network part that comprises one or more network elements of a core network of a UMTS system (Figure 1, Column 7 lines 25 – 28).

Haverinen (Section 0162) and Chuah both teach a wireless communication system that is a UMTS system thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the radio network controller and core network taught in Chuah in the UMTS system taught in Haverinen such that a properly functioning UMTS system is enabled.

Regarding Claim 19, Haverinen teaches all of the claimed limitations recited in Claim 16. Haverinen does not specifically teach an access point that is a base station in a wireless telecommunication system.

Chuah teaches an access point that is a base station in a wireless telecommunication system (Figure 1, Column 6 lines 63 – 65, Column 7 lines 13 – 14, Column 7 lines 25 – 28).

Haverinen (Section 0162) and Chuah both teach a wireless telecommunication system that is a UMTS system thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the base station taught in Chuah in the UMTS system taught in Haverinen such that a properly functioning UMTS system is enabled.

Regarding Claim 20, Haverinen teaches all of the claimed limitations recited in Claim 16. Haverinen further teaches an access point that is a UMTS system (Figure 1, Section 0162, Section 0171, there is a second radio link for communicating directly with the UMTS network thus the access point is the UMTS network).

Haverinen does not specifically teach a radio network controller controlling one or more base stations in the wireless telecommunication system, and the fixed network part comprising one or more wireless network elements of a core network of the telecommunication system.

Chuah teaches a radio network controller controlling one or more base stations in the wireless telecommunication system, and the fixed network part comprises one or more wireless network elements of a core network of the telecommunication system (Figure 1, Column 7 lines 25 – 28).

Haverinen (Section 0162) and Chuah both teach a wireless telecommunication system that is a UMTS system thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the radio network controller and core network taught in Chuah in the UMTS system taught in Haverinen such that a properly functioning UMTS system is enabled.

Conclusion

6. Any inquiry concerning this communication should be directed to Raymond S. Dean at telephone number (703) 305-8998.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung, can be reached at (703) 308-7745. Any response to this action should be mailed to:

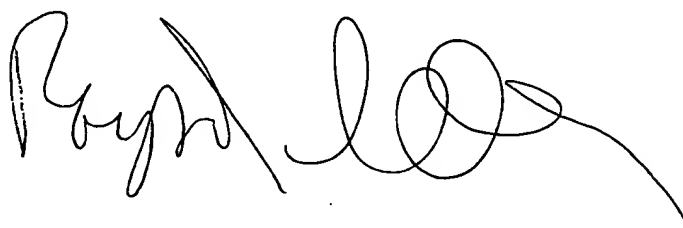
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Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology center 2600 only)

Hand –delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

A large, stylized handwritten signature in black ink, likely belonging to the examiner or supervisor mentioned in the text.


NAY MAUNG
SUPERVISORY PATENT EXAMINER